IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

John Shanklin, et al.

Serial No

&\10/822,370

Confirmation No.: 2864

Filed:

EP 1 3 2004

April 12, 2004

For:

Mutant Fatty Acid Desaturase and Methods for Directed Mutagenesis

Mail Stop Missing Parts Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

TRANSMITTAL

In response to the Notice to Comply with Requirements for Patent Applications Containing Nucleotide Sequence and/or Amino Acid Sequence Disclosures dated 8/11/04 regarding the above-identified case, the following documents are enclosed:

- 1. Response to Notice to Comply and Amendment to Incorporate Sequence Listing And Substitute Sequence Listing in Computer Readable Form.
- 2. Copy of Sequence Listing in Paper Form
- 3. Copy of Sequence Listing in Computer Readable Form
- 4. A copy of the Notice to Comply with Requirements for Patent Applications
 Containing Nucleotide Sequence and/or Amino Acid Sequence Disclosures dated 8/11/04.

Respectfully submitted

Margaret C Bogosian

Attorney for Applicants

Registration No. 25,324

Date: 9/2/04

Ms. Margaret C. Bogosian, Patent Counsel Brookhaven National Laboratory Bldg. 475D - P.O. Box 5000 Upton, New York 11973-5000

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CERTIFICATE OF MAILING (37 CFR 1.8a)

I hereby certify that this paper (along with any papers referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Mail Stop Missing Parts, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

/9/04 Date

Maria Pacella, Office of Intellectual Property

And Sponsored Research

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:

John Shanklin, et al.

Application No.:

10/822,370

Filing Date:

April 12, 2004

Confirmation No.:

2864

Title:

MUTANT FATTY ACID DESATURASE AND METHODS FOR

DIRECTED MUTAGENESIS

RESPONSE TO NOTICE TO COMPLY AND AMENDMENT TO INCORPORATE SEQUENCE LISTING

Mail Stop Missing Parts Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

On August 11, 2004 a Notice to Comply with Requirements for Patent Applications

Containing Nucleotide Sequence and/or Amino Acid Sequence Disclosures (referred to herein as

Notice to Comply) was mailed from the Patent Office. In response, please amend the

Application as described below.

Please insert the attached Sequence Listing after Page 56, and renumber Claims pages to begin with page 66.

REMARKS

Attached is a paper copy of the Sequence Listing prepared in accordance with the provisions of 37 CFR 1.825. Instruction for amendment of the Specification to incorporate the Sequence Listing is provided above, in response to the Notice to Comply. Applicants' Agent hereby states that the above amendments to the Specification include no new matter.

Also transmitted herewith is a copy of the Sequence Listing in computer readable form.

As required by 37 CFR 1.821 (e) or 1.821 (f) or 1.821 (g) or 1.825 (c) or 1.825 (d), Applicants'

Agent hereby states that the content of the Sequence Listing in paper form and computer readable form are identical and include no new matter.

Respectfully submitted,

Christine L. Brakel
Agent for Applicants

Registration No. 45,772

Date: September 2, 2004

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UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Dox 1450 Alexandra, Vriginia 22313-1450 www.unplugov

APPLICATION NUMBER

FILING OR 371 (c) DATE

FIRST NAMED APPLICANT

ATTORNEY DOCKET NUMBER

10/822,370

04/12/2004

John Shanklin

BSA 04-11

26302 BROOKHAVEN SCIENCE ASSOCIATES/ BROOKHAVEN NATIONAL LABORATORY BLDG. 475D - P.O. BOX 5000 UPTON, NY 11973 CONFIRMATION NO. 2864
FORMALITIES LETTER
OC000000013507061

Date Mailed: 08/11/2004

NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES

Filing Date Granted

Applicant is given TWO MONTHS FROM THE DATE OF THIS NOTICE within which to file the items indicated below to avoid abandonment. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

• This application clearly fails to comply with the requirements of 37 CFR. 1.821-1.825. Applicant's attention is directed to the final rulemaking notice published at 55 FR 18230 (May 1, 1990), and 1114 OG 29 (May 15, 1990). If the effective filing date is on or after July 1, 1998, see the final rulemaking notice published at 63 FR 29620 (June 1, 1998) and 1211 OG 82 (June 23, 1998). If the effective filing date is on or after September 8, 2000, see the final rulemaking notice published in the Federal Register at 65 FR 54604 (September 8, 2000) and 1238 OG 145 (September 19, 2000). Applicant must provide an initial computer readable form (CRF) copy of the "Sequence Listing", an initial paper or compact disc copy of the "Sequence Listing", as well as an amendment directing its entry into the application. Applicant must also provide a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d). If applicant desires the sequence listing in the instant application to be identical with that of another application on file in the U.S. Patent and Trademark Office, such request in accordance with 37 CFR 1.821(e) may be submitted in lieu of a new CRF.

For questions regarding compliance to these requirements, please contact:

- For Rules Interpretation, call (703) 308-4216
- To Purchase Patentin Software, call (703) 306-2600
- For Patentin Software Program Help, call (703) 306-4119 or e-mail at patin21help@uspto.gov or patin3help@uspto.gov

Replies should be mailed to:

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Commissioner for Patents

P.O. Box 1450

Alexandria VA 22313-1450

A copy of this notice <u>MUST</u> be returned with the reply.

Initial Patent Examination Division (703) 308-1202
PART 2 - COPY TO BE RETURNED WITH RESPONSE